

devise and manufacture his own, and some of them have been described in the ornithological literature. Such a stand must be light and attachable to a strong tripod or other support; it must be adjustable, so that the camera may be placed at any angle and held rigid.

At least two such stands have been described within the last year. Both have been designed for botanical work, but would serve the ornithologist equally well. In *Knowledge*, for October, 1911, Mr. Somerville Hastings describes and illustrates one, a "tilting table," as he calls it. In the *Botanical Gazette*, for March, 1911, Mr. Harry B. Shaw describes and illustrates another one along similar lines.

Shaw's apparatus, however, permits a much wider range of adjustment, and is longer and much better adapted for a long-focus camera. As an *adjustable* stand it is far ahead of anything so far offered by the large manufacturers of photographic apparatus. These stands can be secured, built to order, from Mr. Frederick Carl, an expert model-maker (address, 623 H. Street, N. W., Washington, D. C.) at a cost of from \$12 to \$15. The writer obtained one toward the end of last season, and, although it was too late to put it to much use, it is thoroughly satisfactory in its mechanism.

T. C. STEPHENS.

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## Publications Reviewed

Birds of Arkansas. By Arthur H. Howell. Bull. No. 28. Biological Survey, 1911. 160 pp.: 1 map, 6 plates, 4 text cuts.

This is a very welcome addition to faunal literature from a region which has been little known. In the words of Mr. Henshaw, Chief of the Biological Survey, "This report fills an important gap in our knowledge of the avifauna of the Mississippi Valley." Following a general survey of the state, with its "Physical Features" and "Life Zones," a general discussion of the "Economic Value of Birds," the "Game Resources and Legislation," "Sources of Information," and a statement of the "Number of Species" actually recorded, which is 255, and a statement that probably 300 species and subspecies occur, the "List of Species" is given. Under this heading some 35 species are given in parenthesis, which should certainly be found in the state, but which the limited number of observers has not made it possible to record. The most notable contribution to the ornithology of the state in recent years has been made by Mrs. L. M. Stephenson, of Helena. Mr. Howell made an extended survey of the state from April 28

to July, 1910. It seems to us unfortunate that the A. O. U. nomenclature should not have been consistently followed. Fortunately there is no doubt about what form is meant in any case because both the vernacular and scientific names are employed. For instance, while one might be in doubt about the form intended by the use of *Junco hyemalis* the doubt is at once dispelled when we read "Slate-colored Junco," the vernacular name being as distinctive as the repetition of the *hyemalis* in the scientific name. The report is most timely and welcome.

L. J.

A Biological Survey of the Sand Dune Region on the South Shore of Saginaw Bay, Michigan. Prepared under the direction of Alexander G. Ruthven, Chief Field Naturalist, Michigan Geological and Biological Survey. Publication 4, Biological Series 2, 1911. 347 pp., 1 map; XIX plates.

The part of this report relating to the birds was prepared by Norman A. Wood and Frederick Gaige. The time spent in the region covered was from June 13 to August 27, 1908. "It may be seen from this itinerary that three distinct localities were studied: the sand region between Sand Point and Hat Point, Stony Island, and the clay country at Rush Lake. In the sand region the habitat conditions are dominated by the sandy soil. The ridges are covered with open growths of jack pine and the swamps with dense growth of maple, cedar, etc., or with grasses and sedges. The clay country at Rush Lake, on the other hand, is largely taken up with open fields." The listed species are 128 in number, the most of them with copious and interesting annotations. 83 are given as breeding in the region, with four additional species as doubtful breeders.

The statement is made that migrants began to appear about August 1. This seems strange when we remember that at Point Pelee, Pelee Island, and Cedar Point, the migrations were well advanced by that time, the first migrating Shore Birds having been recorded as early as the first of July. The later beginning here on the east side of Saginaw Bay may probably be accounted for by a large body of water to the north and east and the rather isolated position of this land mass.

These detailed studies which the University of Michigan is undertaking are welcome additions to our knowledge of living forms.

L. J.

The Home-life of the Osprey. Photographed and Described by Clinton G. Abbott, B.A., Associate of the American Ornithologists' Union, with some Photographs by Howard H. Cleaves, As-